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ABSTRACT

This guide is intended to help teachers administer tests to adult students so that the students achieve the highest possible test results. The booklet is divided into five sections. The first section reminds the teacher of the various differences in and needs of the adult learner, while the second section gives some tips on how to conduct a mini-course in study skills. In the third section, the various types of tests are identified (such as criterion-referenced tests and standardized tests) and reasons for their use in particular situations given. In the fourth section, the teacher is given tips for test administration, such as timing, atmosphere, physical constraints, good working conditions, and review for the test. The final section explains how to teach students to be test-wise. A checklist for test administrators is included. Sample lists of tests to be used with adults and a reference list complete the guide. (KC)

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## Improving Test Scores of Adults

Children who seem so alike and similar when they are young grow and mature into diverse and often complex adult personalities. Each year of growth shapes and molds the individual that eventually will provide the strength and stability of adult society.

While these individual differences are necessary for a democratic society, they can create problems for the educational system. The larger the school and/or the class, the less responsive is the system to the individual needs of the learner. Unfortunately, the system tends to produce conformity rather than cultivating creativity and individual growth.

Regardless of the age of the student, or grade level, the teacher knows that no matter how hard they try, it is impossible to teach and test students as though they were similar. The older the student, the more this is true. Individual differences grow as the child grows, thus teaching and testing the adult learner requires a broad educational perspective, an understanding and compassion for

human development and a skillful and creative educator.

The adult student is usually classified as over sixteen years of age and enrolled in other than a regular public or private school secondary program. They can be highly motivated to learn or not motivated in the least. Many of the younger adults could have un-diagnosed learning problems or emotional handicaps that prevented prior academic success. The older adult education students can possess these same characteristics and in addition have vision, hearing and/or body chemistry problems. Both groups can have family, financial, employment, transportation and other problems that tend to distract from learning situations. Although it is impossible for the adult education teacher to solve these problems, they should be aware that they exist. Good teachers "sell" their subject and show a genuine interest in all students. Another problem area that is often overlooked when we teach and test older adults is in the area of handicaps and physical problems. When children enter the first grade, they are screened for physical and developmental levels. When adults enter the classroom, they bring

with them many diagnosed and undiagnosed problems. Their hearing, vision and hand coordination might not be as sharp as it once was and many will have learned to compensate for minor difficulties. The adult teacher and test administrator must be alert to this most important area.

How To Study

To learn one must study. As painful as it might be, it is necessary to study if we are to play the game of learning. Studying techniques will vary from course to course, teacher to teacher and student to student. Therefore, it is extremely important for each adult education teacher to review the basic requirements for the course and suggest study skills and methods for their students. Teachers must remember to motivate their class to learn their subject by explaining the purposes and usefulness of their course as it relates to the needs of each student. They need to show concrete examples of why their subject is important and how it relates to the outside world.

Many adult basic education students need to have their study techniques reviewed for them. Others will never have received formal training in study skills. Therefore, the

first order of business, for each new class should be a short lesson on How To Study For This Course. Because of the wide range of individual differences in an adult education class, there will be no right nor wrong way to study, no universal method adopted by all. The skillful teacher will match the mental and physical age levels with the personalities to create a comfortable and effective study program for each student. The first step in many adult education courses is the assessment of academic performance-specifically, the reading level. There are a number of tests available for this purpose and a sample has been listed in the appendix.

Suggested steps to include in your study course are:

1. Motivation to learn your subject. Teacher must show relevance of course, model enthusiasm and interest in course, show a genuine and individual concern for each student.
2. Importance of planning and developing study schedules.
3. Working to improve basic skills (assessment

of current level of performance). Reading to understand content, listening, memory.

4. Learning notetaking from lecture and text book.
5. Reviewing - for learning and remembering

Testing

For the most part, testing done by teachers consists of a teacher constructed test (a criterion or content - reference test) and is administered to groups of students using paper and pencils to record their answers. This type of test has been created by the teacher and is closely related to instructional content. The results of this test relate to what the student has learned. They only include small specific amounts of instructional content.

The other type of widely used measure, usually constructed by an outside agency, is the standardized test. The results of this test are compared against groups of similar students who have taken the test and form the standard or normative group.

Criterion - referenced and the standardized tests serve important educational functions: both are designed to gather information for the teacher, student, educational leader (administration), school board, and parent-taxpayer. Indeed this data that is collected will provide information for Decision Making - which is really the major purpose of all testing.

Did you score high enough to be admitted? Program screening. Should we move Jack to the third reading group? Placement. Did Sara learn addition? Mastery. Is Diana's problem reading comprehension? Diagnosis.

Before administering any test, the test administrator must be able to answer two questions:

1. What type of information is required for making a decision?
2. How will the test results be used?

When the instructor wants to know if the student has learned the subject matter (and conversely if the teacher has taught the subject matter), then a teacher made criterion-reference test would be administered.

If the school board wanted to know how their sixth grade was doing in modern reading, then a standardized test could be selected. When the test administrator selected the standardized test they would review all available published information which would include:

1. The age of the test
2. Test content (for validity)
3. Cost of test, scoring and reports
4. Reports available
5. Expert evaluation of test

The second question - How will the test results be used must be answered for each individual student. Teachers must also remember never to use only <u>one</u> test to make a decision. A series of tests - three or four should be used for important decisions. Test results are too unreliable to depend on only <u>one</u> score. The biggest mistake made by teachers is to use one measure as a basis for evaluation - tests should only be considered a rough guide.

Test Administration

A good test administrator will begin preparing students for tests several weeks before the exam. They will explain to the students the purpose and need for the exam, the curriculum content that will be included, the type of test, either essay or objective, criterion referenced or standardized, length of the test, place and time for the test and rules for scoring the test (right only, or right-wrong) and when the results will be available to the students.

This presentation must be accomplished in such a way as to convey the seriousness of the exam while at the same time reducing the anxiety level of the test takers. This presentation can be repeated at least a week prior to the test with another reminder the day before the test.

In many schools a "testing day" has been assigned each teacher and therefore there is little choice when to give a test. However, if they had a choice, most teachers would try to give the test at the end of the week, on a Friday rather than on a Monday. They also

prefer to test in the morning when the students are most alert. However with many adult education classes, this may not be possible.

Many test administrators would limit the number tested to twenty or twenty-five. The teacher often has no choice on the number in the class or the number to test. The type of exam and the physical arrangements of the classroom can also affect this decision. If the class is too large, there is the possibility of having two or three testing dates.

The importance of the attitude of the test administrator toward the test and the testing situation cannot be over emphasized. All verbal and non-verbal, conscious and unconscious behavior must convey to the students that this test is necessary and important. The test is a serious matter and it's important for the student to understand this fact. Students are experts at "picking-up" and assessing cues from teachers and the adult education student is perhaps more skillful because they have had longer to practice. Many a score has been lowered before the test was administered.

The adult education teacher should review with the class the elementary rules for taking a test. Desk tops clear, books and papers on floor or under desks, pencils, paper, no talking, eyes on own paper, penalty for cheating, etc. The test administrator should check the physical testing conditions (see appendix A for check list) making certain the lighting is bright enough, ventilation and/or heating, rest rooms available and open (if Saturday or evening). As simplistic as these suggestions are, they are important and must be followed.

When administering a test the test administrator should stand in the front of the room while giving the directions and working the sample. A good test administrator will never sit at the desk and begin doing other work, ie. correcting papers, reading, preparing assignments but will maintain continued visual contact with the class. Proper test administration requires full and complete attention to the task. It is not "free time" for the test administrator.

Another distraction for test takers is when someone (usually a friend) enters the testing room and begins

to visit with the test administrator. This is a No-No! Few of us can concentrate with such a distraction. Many test administrators will have a sign they hang on the door with big letters - KEEP OUT - TESTING. This discourages vistors and demonstrates the importance of the testing to the students.

Several days prior to the day scheduled for testing, the test administrator must review the testing manual, instruction for giving the test and the material contained in the test. This, of course, assumes it is a standardized test rather than a teacher constructed criterion (or content) referenced test. When reading the instructions and test content, try and assess the vocabulary and reading levels and determine if your class will be able to understand and/or read the test. Check the population on which the test was NORMED, the validity and reliability statistics and the content or face validity. Does it represent the content of the course? Review several sources of expert opinion such as Tests in Print or Mental Measurement Handbook.

Note:

When teachers who are also test administrators review a standardized test for content validity, be it one developed by the state (such as EQA in Pennsylvania) or one published by an independent test publisher, they will review the test questions or an item analysis of the responses and say, "Sure my students missed those questions, they weren't included in my course."

The teacher returns to the classroom and makes sure that this material is included for the next test. In a sense the teacher is teaching for the test, the test now takes the flavor of a criterion-referenced test and perhaps worst of all. Educators are permitting test developers (who are often young and inexperienced) to establish <u>their course content</u>. In effect they are telling the teachers which areas are important to teach. The test publishers are establishing your curriculum. Teachers, beware!! Don't let this happen.

In testing adult students, the student often has little experience with sophisticated answer sheets (which cannot be bent or multilated), marking systems requiring a certain type pencil, darkened blocks and complete erasures of all unnecessary marks. The mechanical process of using separate answer sheets and test booklets as common as it is to most of us, might be new to the adult learner. The test administrator must be sensitive to the level of test-taking knowledge of the students. Practice sessions with similar booklets and instructions will provide the "hands-on" experience needed to teach these techniques and procedures.

Now let's review the rules for test administrators.

1. Awareness of individual differences, handicaps and hardships.
2. Review of study skills
3. Proper test selection and wise use of results
4. Professional test attitude and administration procedures.
5. Using the test results for the benefit of the student.

6. Understanding the lack of importance of any <u>one</u> test result.

## Teaching Test - Wiseness

Teachers have realized that test taking skills, like other academic skills, can be taught to their students. This area, referred to as test-wiseness, is defined as the student's ability to use the characteristics and formats of a test and/or the test taking situation to receive a high score.[1] Even students with a high degree of academic aptitude and efficient study techniques can increase their performance by learning the skills associated with efficient test taking.

A number of studies have indicated that teaching students test taking skills does indeed improve their test scores. Bloom (1950) studied the problem solving styles of high and low test performers and formed that each type

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[1] Millman, J., Bishop, C.H., Ebel, R, An Analysis of Test-Wiseness, Educational and Psychological Measurement, Vol. XXV, No. 3 1965. pp. 707-726. Much of the material in this section is from this excellent study by the Cornell Social Science Research Center as a result of a Ford Foundation Grant.

could be identified. He found that students trained in problem solving techniques such as the comprehension of test directions and the ability to reason logically, but not receiving additional training in subject-matter knowledge, made significant gains in test scores.

In order to teach the skills of test taking, the adult education teacher has to reduce the test anxiety level. For adults this can build and produce emotional stress that will hinder performance. They become so afraid of the test, afraid of failure -- that it becomes a self-fulfilling prophesy. They know they are going to fail the test so they fail. Excessive anxiety about a test is harmful and part of the teaching process will be to reduce this anxiety to controlable levels.

There are a few students who, on the surface, will react in the opposite way. They will have a carefree attitude about the test. Usually this is to cover their anxiety about failure -- to soften the blow. Teachers must be careful with these types of reactions and not try to increase the pressure or motivation driving up their anxiety level. The goal is to relax

them, put them at ease, not to surprise them, but to totally prepare them for taking the test.

Teaching test-wiseness to students is really teaching them to think logically. Teaching them to think about the testing situation and the test itself to gain a slight advantage over "chance". Some of the methods will require some knowledge of subject matter and others will require information about the test developer. Let us now review some of these basic test-wiseness principles.

The previously sited study by Cornell University separated the teaching of test-wiseness into two categories.

1. Elements that are independent of the test constructor or test purpose.
2. Elements that are dependent upon the test constructor or purpose.

The following is an outline of each of the elements and suggestions for teaching test-wiseness.

I. Elements independent of test constructor or test purpose.

A. Time-using strategy

1. Begin to work as rapidly as possible with reasonable assurance of accuracy.
2. Set up a schedule for progress through the test.
3. Om't or guess at items which resist a quick response.
4. Mark omitted items, or items which could use further consideration, to assure easy relocation.
5. Use time remaining after completion of the test to reconsider answers.

B. Error-avoidance strategy

1. Pay careful attention to directions, determining clearly the nature of the test and the intended basis for response.
2. Pay careful attention to the items, determining clearly the nature of the question.
3. Ask examiner for clarification when necessary, if it is permitted.

4. Check all answers.

C. Guessing Strategy

1. Always guess if right answers only are scored.
2. Always guess if the correction for guessing is less servere than a "correction for guessing" formula that gives an expected score of zero for random responding.
3. Always guess even if the usual correction or a more severe penalty for guessing is employed, whenever elimination of option provides sufficient chance of profitting.

D. Deductive Reasoning Strategy

1. Eliminate options which are known to be incorrect and choose from among the remaining options.
2. Choose neither or both of the two options which imply the correctness of each other.
3. Choose neither or one (but not both) of two statements, one of which, if correct,

would imply the incorrectness of the other.

4. Restrict choice to those options which encompass all of two or more given statements known to be correct.
5. Utilize relevant content information in other test items and options.

II. Elements dependent upon the test constructor or purpose.

A. Intent Consideration Strategy

1. Interpret and answer questions in view of previous idiosyncratic emphasis of the test constructor or in view of the test purpose.
2. Answer items as the test constructor intended.
3. Adopt the level of sophistication that is expected.
4. Consider the relevance of specific detail.

B. Cue-Learning Strategy.

1. Recognize and make ease of any consistent idiosyncracies of the test constructor which distinguish the correct answer from incorrect options.

   a) They are longer (shorter) than the incorrect options.

   b) They are qualified more carefully, or represent a higher degree of generalization.

   c) More true (false) statements are included.

   d) They are placed in a certain physical position among the options (such as in the middle).

   e) They are included (are not included) among similar statements, or made (not made) one of a pair of diametrically opposite statements.

   f) They are composed (are not composed) of familiar or stereotyped phraseology.

h) They are not grammatically inconsistent with the item.

2. Consider the relevancy of specific detail when answering a given item.
3. Recognize and make use of specific determiners.
4. Recognize and make use of resemblances between the options and an aspect of the item.

Many of the above suggestions and ideas will seem simplistic for the teacher or experienced test taker. However, it does not take long to learn that many students, particularly adult students, have never learned the science of test taking. It is true that few of the above suggestions will automatically create above average students - but several points on an exam will light the spark of academic motivation.

This booklet has been designed to give the adult educator a start in building a unit and/or lessons on increasing the test taking skills of the students.

Check List For Test Administrators
By: Dick May

Physical

-- Clean room

-- Clear chalkboard

-- Clear, neat desk

-- Proper lighting

-- Comfortable room temperature

-- Proper ventilation

Test Protocal

-- Class alerted to test two weeks in advance

-- Class reminded of test two days in advance

-- Test administrator has reviewed test for;

-- Readability (printing large enough, not too light)

-- Curricular or content validity

-- Vocabulary and/or reading level

-- Clearity of samples

-- Test adminstrator instructions

-- Length of time for test

-- Counted number of test (and answer sheets)

-- Easy of recording answers (class has experience with

type of answer sheet, format.

Test Administrator has

-- Notified office and others of testing place and time

Placed do not disturb Test in Progress sign on door.

Practical non-verbal actions such as;

-- Physical appearance (dress professionally)

-- Body language, facial expression

-- Voice tone, pitch

-- Overall attitude about test

-- Test administrator has attempted to convey serious attitude and importance of test

-- Test administrator has attempted to reduce anxiety level of students

-- Sharpened pencils - scrap paper (if needed). In seats -- place all books under desk or on floor.

No talking

Review each section when finished. Don't rush but work quickly.

Answer those you know first.

-- Start on time

-- Finish on time

SAMPLE OF TESTS TO USE WITH ADULTS

Adult Basic Learning Examination

Adults with achievement levels grades 1-12, 1967-71
Harcourt Brace Jovanovich, Inc.

California Achievement Tests

Grades 1-14, 1934-72 (also Reading)
CTB/McGraw-Hill

Tests of Adult Basic Education

Adults at ready levels of children in grades 2-9, 1967
CTB/McGraw-Hill. Also Adult Level

Intelligence - (Group)

Army General Classification Test/First Civilian Edition

Grades 9-16 and adults, 1940-60
Science Personal Associates, Inc.

California Short-Form Test of Mental Maturity

Grades K-16 and adults, 1938-65
CTB/McGraw-Hill

Culture Fair Intelligence Test

Ages 4-adult including mentally retarded adults, 1933-73
Bobbs Merrill Company, Inc.

Fundamental Achievement Series

Semiliterate job applicants and employee, 1968-70
Psychological Corporation

Pressey Classification and Verifying Test

Grades 1-12, and adults, 1922-58
Bobbs Merrill Company, Inc.

Revised Beta Examination

Ages 16-59, 1931-57
Psychological Corporation

Thurstone Test of Mental Alertness

Grades 9-12 and adults, 1943-68
Science Research Associates, Inc.

Miscellaneous

Brown-Carlsen Listening Comprehension Test

Grades 9-16 and adults, 1953-55
Harcourt Brace Jovanovich, Inc.

American Study Habits Survey

Grades 7-12, 1964
American Guidance Services, Inc.

Reading

Iowa Silent Reading Tests

Grades 4-16, 1927-73
Harcourt Brace Jovanovich, Inc.

Reading Test: McGraw-Hill Basic Skills System

Grades 11-14, 1970
McGraw-Hill Book Company, Inc.

Schrammed-Gray High School & College & Reading Test

Grades 7-16, 1940-42
Bobbs Merrill Company, Inc.

Diagnostic Reading Scales

Retarded reader in grades 7-12, 1963-72
CTB/McGraw-Hill

Gray Oral Reading Test

Grades 1-16 & adults, 1963-67
Bobbs Merrill Company, Inc.

Adult Basic Reading Inventory

Functionally illiterate adolescent & adults, 1966
Scholastic Testing Service, Inc.

Adult Performance Level (APL)

Measure five life skills
Identifying facts and terms, reading, writing, computation and problem solving in each of five content areas - community resources, occupational knowledge, consumer economics, health, government and law.
ACT, Iowa City, Iowa 52243

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